

ers are all to be congratulated on a distinct botanical achievement.

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NEW YORK BOTANICAL GARDEN

THE MEMOIRS OF A BOTANIST

Erinnerungen und Welteindrücke eines Naturforschers. By HANS MOLISCH. Pp. 232. Emil Haim, Wien and Leipzig. 1934, Rm. 9.00.

WHAT makes the reading of botanical history so interesting are accounts of the personalities who participated in the advancement of this branch of science. Here belong the memoirs of outstanding botanists, especially of men whose leadership has contributed as much to botanical progress as their own research work. One of these men is Hans Molisch. His latest book is fascinating because of the many problems which occupied him during his life, the many botanists whom he met and the broad cultural background of his life and travels.

Molisch was born in 1856 at Brünn in the former Austro-Hungarian empire and as a nine-year-old boy he met Gregor Mendel, who was a neighbor and friend of the family. From his father, who was a horticulturist and commercial florist, Hans Molisch acquired in his youth a practical knowledge of gardening which in turn aroused his interest in theoretical botany and especially in plant physiology. This early training showed itself in a later book on "Plant Physiology as a Theoretical Basis for Horticulture" (1915). There, Molisch said, the plant physiologist should learn from the practical horticulturist and the latter in turn from the physiologist. It became his most popular book and has had six editions to date, besides being translated into several languages.

Molisch attended the University of Vienna, where he became Wiesner's assistant. Later he taught at the Technische Hochschule in Graz, where the author of this review was one of his students. From Graz he was called to the German university of Prague and finally, as Wiesner's successor, to Vienna.

A considerable portion of the book is devoted to observations of tropical plant life during a visit to Buitenzorg in Java in 1897-98. On his return trip Molisch visited the United States. From 1922 to 1925 he taught plant physiology in the University of

Sendai in Japan where he had been called to organize the botanical division of the newly founded institute of biology. After his retirement from the University of Vienna, Molisch taught for one year (1928-29) at the institute for plant physiology of Sir Jagadi Chandra Bose in Calcutta and traveling home he again visited the United States. He always showed great interest in the botanical work done in this country and had accepted an exchange professorship at Columbia University when the great war broke out, which frustrated this plan.

The "Erinnerungen" gives a detailed account of the research work done by Molisch. Among his earlier studies he mentions a histologic chemistry of vegetable foods (1891), a treatise on iron in its relation to plants (1892), investigations about the nutrition of algae, the freezing of plants and the luminosity in plants. Fruits of his first visit to the tropics were researches about the forming of indigo, of palm-wine and about the secretion of water by liana-stems. He was always greatly interested in plant chemistry and in 1913 he published a "Microchemistry of Plants," of which three editions have appeared to date. His book on plant physiology and horticulture (1915) has been mentioned. The three years in Japan resulted in a volume entitled "Plant Physiology in Japan on the Basis of Personal Observations" (1926) and the more personal experiences of this trip found their expression in a book "In the Land of the Rising Sun" (1927). The observations gathered during his second trip to India are contained in a book entitled "A Naturalist in India" (1930). Even after retirement from teaching such contributions were made by Molisch, as "Duration of Plant Life" (1929) and "Plant Chemistry and Plant Relations" (1933). Naturally all Molisch's books are written in German and the titles as given in this review are translated into English.

Any student of botany who can read German fairly fluently will find the "Erinnerungen und Welteindrücke eines Naturforschers" easy and pleasant reading and will enjoy making the acquaintance, through this book, of an excellent botanist and a most delightful personality.

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REPORTS

APPROPRIATIONS FOR GRANTS-IN-AID BY THE NATIONAL RESEARCH COUNCIL

As announced in SCIENCE for January 18, 1935, the National Research Council has been given funds for grants-in-aid for the year 1935. Applications for grants from this fund must be in the hands of the

secretary of the Committee on Grants-in-Aid on or before April 1, 1935. Additional information and blank forms for filing application will be furnished upon request. Action on these applications will be taken about the middle of May.

At meetings in November and December, 1934, the